

**MINIMUM PLAN REQUIREMENTS FOR
ADDITIONS, GARAGES, DECKS AND OTHER SMALL PLANS**

1. SITE PLANS REQUIREMENTS

- A. **PLOT PLANS** are required to be submitted with all building permit applications. Incomplete plot plans will be not be accepted. A checklist will be provided at the time of building permit submittal to ensure all elements are provided and will require signature by applicant to verify all information to be true and correct. See Below for all departments requirements for site (Plot) Plans.

NOTE: When Public Works Road Encroachment, Environmental Servers, and Hydrology approvals are required the following is to be submitted.

1. **2 Site (Plot) Plans With Two (2) Sets Of Building Plans Must Be Submitted For Plan Review:** One set is kept on file and the other is returned to you to keep on the job site. The returned set, stamped APPROVED PLANS will contain any corrections which you must make to meet the minimum code requirements.
2. **Public Works Road Encroachment:** One (1) copy of the site plan is required with the Right of way application.
3. **Public Works Grading:** One (1) copy of the site plan is required with the Grading application for residential projects. Two (2) Complete building plan sets with site plans are required for commercial projects.
4. **Hydrology:** One (1) copy of the site plan is required with the Hydrology application.
5. **Environmental Services Septic Approval:** One (1) Copy of the site plan and One (1) extra copy of the floor plan are required at time of permit submittal.

NOTE: Upon receiving your Septic Permit Number, it is the applicant's responsibility to contact the Environment Services to ensure the approval of the septic system has been approved and signed off on the building permit. To contact the County Environmental Services Department, it is located at 2500 North Fort Valley Road, Bldg 1, Flagstaff, Arizona 86001, telephone (928) 679-8764.

**2. SITE PLANS SHALL INCLUDE AT LEAST THE FOLLOWING INFORMATION:
INDIVIDUAL DEPARTMENTS MIGHT REQUIRE ADDITIONAL DETAILS**

- A. **PLOT PLAN – MUST BE DRAWN TO SCALE:** 1" = 10' for parcels of less than 1 acre, 1" = 20' or 1" = 30' for parcels of one acre up to 2 ½ acres and 1" = 40' or 1" = 50' for parcels over 2 ½ acres. For parcels that exceed 2 ½ acres or of irregular shape, site plan overviews at scales of 1" = 100' are required along with an inset plan of the structure(s) and on-site sewage system at one of the scales identified above.
- B. If your plot plan is on paper larger than 8 ½" x 11", you must provide one reduced copy (does not have to be to scale) on 8 ½" x 11" paper for scanning purposes.
- C. Some subdivisions have Design Review Boards that require plans to be approved by the Board before a building permit is issued. If the subject property is in such a subdivision, two site plans must have original Board approval stamps. A list of such subdivisions is maintained at the Department of Community Development.

3. **General Property Information: Required**

- A. Property lines, setback lines and dimensions and street(s) labeled
- B. Direction of slope on property and the direction of natural drainage - accurate topography may be required when necessary
- C. Slopes that exceed 15%, including any cut banks greater than 4' in height
- D. North arrow and site plan scale
- E. Streams, creeks, washes and floodplains
- F. Note: A survey of the property by a Registered Land Surveyor is required if any of the following apply:
 - 1. The proposed construction is for a new structure, or an addition to an existing structure on a property affected by the 100-year floodplain. This requirement can be waived by the Floodplain Administrator
 - 2. The property is ½ acre or smaller
 - 3. The Building Official requires verification that the location of the structure(s) is in accordance with the approved plans (2006 International Building Code and 2006 International Residential Code)

4. **Existing Property Improvements: Required**

- A. Location of all existing structures. Label all structures, show dimensions from structure to property lines and distances between structures
- B. Location of all existing wells
- C. Location of all existing drainage facilities
- D. Location of all existing driveways
- E. Location of all ingress and egress easements and utility easements (when applicable)

5. **Proposed Property Improvements: Required**

- A. Location and dimensions of all proposed structures in relation to property lines and other structures
- B. Location of all proposed wells
- C. Location of all new and existing septic tanks, leach fields and sewer lines.
- D. Location of all new driveways and road improvements including type of material
- E. Show all utility connections and line directions:
 - 1. Leach field location
 - 2. Septic tank location
 - 3. Sewer line Location
 - 4. Water line location
 - 5. Gas line location
 - 6. Liquid propane gas tank location or natural gas meter location
 - 7. Underground liquid propane tank location
 - 8. Air conditioner location
 - 9. Electric meter location
- D. Retaining wall locations. Areas to be filled (fills in excess of 4' shall be engineered).

NOTES: A survey of the lot may be required by the Building Official to verify that the structure(s) is located in accordance with approved plans. 2006 International Building Code.

7. **CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA – COCONINO COUNTY**

A. **SNOW LOADS** - Amend IBC 1608. By adding the following:

Snow Loads for roof design shall be considered as a non-reducible live load on the roof. The Ground Snow Load shall be a minimum of fifteen (15) pounds per square foot greater than the listed Snow Load for the following areas:

1. **Fifty (50) pounds per square foot:**
 - a. **Hart Prairie**
 - b. **Kendrick Park**
 - c. **Jacob Lake and the North Rim**
 - d. **Any building site at an elevation of 8000 feet or more above sea level.**
2. **Forty (40) pounds per square foot:**
 - a. **Areas surrounding Flagstaff**
 - b. **Doney Park**
 - c. **Valle**
 - d. **Tusayan**
 - e. **Parks**
 - f. **Areas surrounding Williams**
 - g. **Clear Creek Pines**
 - h. **Starlight Pines**
 - i. **Happy Jack**
 - j. **Forest Lakes**
 - k. **Mormon Lake**
 - l. **Kachina Village**
 - m. **Mountaineer**
 - n. **Pinewood**
3. **Thirty (30) pounds per square foot:**
 - a. **Cameron**
 - b. **Tuba city**
 - c. **Areas between Twin Arrows and Winslow**
 - d. **Oak Creek Canyon**
 - e. **Areas surrounding Ash Fork and Seligman**
 - f. **Areas surrounding Fredonia**
 - g. **Alpine Ranchos and Leupp**
4. **Twenty (20) pounds per square foot:**
 - a. **Greenehaven**
 - b. **Marble Canyon**

B. **Wind Speed – 90 Miles per Hour. (105 Miles per Hour, 3 second wind gust)**

C. **Seismic Design Category – Do**

Exception: When determined by a Geotechnical Engineer that the site class is rated A, B or C, base on the soils testing, then the buildings may be designed to a seismic design category C. IBC 1613.1

D. **Weathering – Moderate**

E. **Frost Line – Frost line Depth shall be thirty (30) inches in Coconino County with the exception of Oak Creek/Sedona, Marble Canyon, and Greenhaven, where depth shall be twenty-four (24) inches.**

EXCEPTIONS – Detached accessory structures located in residential zones for private use, sized less than one thousand (1,000) square feet, single story, and may have a foundation depth of eighteen (18) inches into undisturbed soil.

Detached accessory structures of light frame construction such as storage sheds in residential zones for private use, sized four hundred (400) square feet or less may be grade set on pressure treated skids and shall be anchored with approved methods

F. **Termite – Site Specific: When treatment is required by other agencies or lending institutions, then the report shall be filed with the permit from the Coconino County Building Department**

G. **Ice Barrier Underlayment Required. – All areas of Coconino County, Except: Marble Canyon and Greenhaven.**

H. **Flood Hazard – The Flood Plain Administrator is the Director of Coconino County Community Development.**

I. **When clay soils are encountered at a building site as determined by a pre-construction soil investigation the footing design shall be done by an engineer licensed in The State of Arizona. If Inspector finds a condition exists in the first inspection a STOP WORK will be issued. Then a geotechnical report shall be submitted to the Building Department with an engineered footing design.**

J. **5/8” Type X gypsum board required on detached garages, 1,000 square feet or larger or considered 2 stories when within 25’ feet of single family dwelling or within 20’ feet of property lines.**

8. **FOUNDATION PLAN: SCALED 1/4" EQUALS 1’ FOOT.**

A. **Fully dimensioned two line drawings. Show all, Footings, Foundations, Stem walls, Braced Wall Line Footings and Pier locations.**

B. **Under slab: Interior bearing walls, post and column footing locations and sizes. Plumbing drains and vent locations, second floor drain location. Specify any in-floor heating system. Under slab duct runs with material type used and installation methods and electric circuits with conduit and installation methods. If Planning to use 2006 International Plumbing Code, A drainage pipe plumbing schematic shall be required, Showing Pipe Sizes, length of Run, Wet Vent locations, Type of Fitting and labeled where and What Type of Fixtures used.**

- C. **Structures located in Seismic Design Categories Do, D1 and D2 shall have exterior and interior braced wall lines. IRC R602.10.11**
- D. **Spacing between braced wall lines in each story shall not exceed 25' feet on center in both the longitudinal and transverse directions. IRC R602.10.11.1**

Exception: In one- and two-story buildings, spacing between to adjacent braced wall lines shall not exceed 35' feet on center in order to accommodate one single room not exceeding 900 square feet in each dwelling unit. Spacing between other braced walls lines shall not exceed 25' feet.

9. **FRAMING PLANS: 1st. FLOOR, 2nd. FLOOR AND ROOF FRAMING PLAN. EACH ON THEIR OWN PLAN. 1/4" EQUALS 1 FOOT. SCALE.**

- A. **Floor framing plans:** Floor joist, type, size and spacing. Girder, type, size, direction, and length of span. Blocking and locations. Decking material: size and or floor sheathing and any mechanical in under-floor locations.
- B. **Roof framing plan:** Rafters: type, size, and direction. Beams: type, size, direction and length of span. Blocking and locations. Post size and material. Roof sheathing. Ridge, Valleys and Hip sizes and labeled. Roof covering material. Any connections i.e. Hurricane ties, post-to-beam connectors, post bases, straps, etc. Call out mechanical in attic space.

10. **FLOOR PLAN: SCALED 1/4" EQUALS 1' FOOT, Need full floor plan of existing structure.**

- A. Fully dimensioned two line drawings, show all walls with openings, interior and exterior walls. Label all rooms, show halls. Stair locations. Cabinets and appliance location. Plumbing Fixture locations. Attic access locations. All plumbing walls should be called out. All locations of furnace, water heaters, decorative appliances, unit heaters, wall heaters and wood or gas stoves.
- B. **Door and window sizes and locations.** One per bedroom or any room that could be used as a bedroom.

- 1. Call out emergency exits.
- 2. Sizes of windows and doors.

C. **Egress Requirements.** One per bedroom or any room that could be used as a bedroom.

- 1. 5.7 square feet clear openable (minimum).
- 2. 20" wide and 24" high (minimum dimensions).
- 3. 44" maximum sill height from floor. The measurement is to be taken from the floor to the bottom of the clear opening of the window.
- 4. 5.0 square feet clear openable (Grade floor openings) within 4' – 0" of adjacent grade below.

D. Safety Issues.

1. 5/8"x G.W.B. locations, i.e. Attached garage, storage and work shops stairs locations or detached garages when required.
2. Provide manufacturers specifications for wood or gas stoves.
3. Natural light and ventilation, 4 % the floor area for light and 8 % for ventilation.
4. **Safety glass locations** to be identified i.e. with-in 24" of door jams, with-in tub and shower enclosures less than 60" above the tub floor, with-in stair well and with-in 60" of the top or bottom of stair landings. Glass greater than 9 sq. feet within 18" and more than 36" above floors within 36" horizontal of walking surface.

E. 3 copies of the floor plan will be required when a bedroom is added or additional fixtures are added to the resident.

F. All windows shall be of Low-E Type and comply with the U-Factor of 0.45 maximum.

G. When metal or aluminum windows are used they shall be Low-E with thermal break and a U-Factor shall be 0.45 maximum.

H. Skylights shall have a U-Factor of 0.60 maximum.

I. Washers and dryers shall not be located in garage. Washer and dryers in room adjacent to garages or in storage room, shall be installed on a platform 8" above floor.

J. The installation of a diagonal riser that cuts a landing into two (2) treads shall not be allowed.

K. Stairs: (a) 7-3/4" maximum rise, (b) 10" minimum tread, (c) 6' - 8" minimum head room, and (d) width 36" minimum. Doors at the bottom of stairs shall have a 3' x 3' floor space before the door. IRC Section R311.5. Where a stairway of 2 or fewer risers is located on a exterior side of a door, other than required exit door, a landing is not required for the exterior side of the door provided the door, other than an exterior storm or screen door does not swing over the landing.

L. Trusses and joists shall be designed to carry the extra load of heating or other equipment that will be installed in attic locations. Also a raised passageway and a raised platform shall minimum for a 12" inch space for the installed of R-38 the insulation may be installed under these areas.

M. Use insulation baffles for air circulation or raised heel trusses. R- 30 for vaulted ceilings. In vaulted ceilings, air circulation and venting shall be maintained above the insulation by deeper roof framing or insulation baffles running continuous up the roof structure. Use approved methods for venting.

N. For tile installations on walls and ceilings in tub and shower enclosures use cement backer board only.

O. Air Admittance Valves are NOT ALLOWED.

11. ELECTRICAL PLAN:

- A. Show all receptacle locations. Arc Fault protection for new bedrooms. Show all switch locations. Show all light fixture locations.
- B. Show all **Smoke Detector** locations: In each new bedroom or sleeping room, and in existing bedrooms. all new hallways and existing hallways giving access to sleeping rooms. Garage, \ basements, workshops, and storage rooms located under habitable area. In vaulted ceilings, 12” to 18” below peak. All new smoke detectors shall be wired to sound together and be equipped with battery back-up. Where smoke detectors are required in existing sleeping rooms, they may be battery operated.

12. ELEVATION PLAN - SCALED 1/4" EQUALS 1' FOOT.

- A. Two elevations required, **front** and **side** elevation. Two dimensional drawing. Outside views showing structure and finish. Doors and window size, height, and locations. Call out type of siding, roof covering material, and trim material. Show over-hangs dimensioned. Show Roof ventilation system. Show roof pitch. Chimney height above ridge. Spark arrestor and type of construction.
- B. On **DECKS** show: height from finish grade to top of deck. Guard rail construction and height, Minimum of 36” from deck to top of guard rail) and any steps with hand rails on concrete pad, with less than 4” spacing between pickets.

13. CROSS SECTION - SCALED 1/4" EQUALS 1' FOOT.

- A. Call out all **Finish** and **Rough** construction elements: Footing and stem, girders and joists for 1st. and 2nd. floor or slab on grade with fill. Stud type and spacing with bottom and top plates. Floor and roof sheathing type and size. Rafters or engineered trusses - type and spacing. Blocking, hurricane ties, gable end bracing, etc. Beam and header sizes and length of span. Insulation in floors, attic and walls. Call out bracing type and location for exterior walls and interior bearing walls. Also all anchor bolts and connectors. Interior finishes and exterior siding type or stucco, and /or brick veneers. Ceiling heights, door and window heights, under floor clearances, minimum wood to earth separation, footing and pier depth below grade.
- B. **Stair information and details:** Dimension unit rise (8” maximum), unit tread (9” minimum), and head room (6’8” minimum). Show handrails and guardrails. Need a 36” x 36” landing at top and bottom of stairs.

14. DETAILS - SCALED 1/2" EQUALS 1' FOOT.

- A. Footing: stem and pier details. Masonry walls, columns and basement foundations details. Ridge beam sizes, over-hang size, plate connections, beam to joist and post-to-beam connections. Retaining wall details and any **Engineering** that may be required. Masonry fireplaces show footing. Block, rebar size and spacing, lintels, fire box, hearth size and chimney. Show 2” of clearance to combustibles or other approved methods. Specifications: Designer or Architect’s remarks or stamps, (when required) and all Manufactured truss specification and Engineered floor plans like BCI or TJI floor system.

- B. **Spray foam insulation type Open cell (7" minimum) or Closed cell (5-1/2" with framing members covered with 1/2" material minimum) or as determined by manufactures specifications for R-value. Provide manufactures specifications at time of plan submittal.**

Note: Sprayed foam insulation shall be a tested, listed and labeled product as recognized by model code agency.

- C. Insulation (R-30 first floor, walls and R-38 roof/ceiling).
- D. **Stud walls - R-19 for 2"x6" and R-15 for 2"x4" minimum.**
- E. **Masonry walls - R-8 minimum.**
- F. **Vaulted ceilings R-30 minimum.**

15. REVISIONS:

- A. Changes in approved plans shall be submitted by means of new drawings.
- B. Addendum letters **PRIOR** to the start of particular work may also be required.

16. PREVIOUSLY SUBMITTED PLANS:

When a plan is approved by the Coconino County Building Department, future plans of the same structures shall have all corrections completed before submitted. Also, Contractors and individuals who obtain a permit on a consistent interval and know the Building Department policies should make their best efforts to have all requirements and information we request on their plans before they are submitted for Plan Review.

17. **List of Home Owner Approvals that are required and shall meet the following requirements:**

- A. A letter of approval from the Home Owner Association.
- B. All pages of both sets of plans shall be stamped with an original stamp as approved by the Home Owner Association. No copies of approved stamps will be accepted.

This shall be done before plans may be submitted to the Coconino County Building Division for plan review. Any set of plans for which Home Owner Association approval is required will not be accepted by the Building Division for plan review without these new standardized requirements.

- A.) **Aspen Shadows**
- B.) **Bear Park**
- C.) **Blue Ridge Estates**
- D.) **Flagstaff Ranch Golf Club**
- E.) **Forest Highlands**
- F.) **Foxboro Ranch Estates**
- G.) **Greenehaven**

- H.) Indian Gardens**
- I.) Mogollon Ranch**
- J.) Pine Canyon**
- K.) Red Lake Estates, Unit 1 and Unit 2**
- L.) Sacred Peaks**
- M.) Slayton Ranch Estates**
- N.) South Rim Ranch**
- O.) South Rim Manufactured Home Park**
- P.) Starlight Pines**
- Q.) Starlight Pines Ranchettes**
- R.) Sunset Vista**
- S.) Tamarron Pines**

Coconino County Community Development
Contact Phone: (928)-679-8850